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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,831	10/08/2003	Matt Kriesel	C228 1020.4	6602
Matt Kriesel Impact Gel Corporation 204 North Washington Street Melrose, WI 54642			EXAMINER VO, HAI	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 11/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/681,831

Applicant(s)

KRIESEL, MATT

Examiner

Hai Vo

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-11, 13-16, 19-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-11, 13-16, 19-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The art rejections are maintained.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 7, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker (US 5,066,259) in view of Hills (US 4,170,086).
Acker discloses a doll structure comprising an envelope comprising a polymer gel substantially surrounding a fiber mat and a skin comprising a top layer and bottom layer as shown in figure 5. The skin is made from a resilient polymeric material (column 4, lines 50-52). The fiber mat has a density less than the polymer gel (claim 1, column 5, lines 17-20). Acker does not disclose a shock-absorbing envelope. However, the doll structure meets all the structural limitations as required by the claims. The envelope comprises a polymer gel surrounding a substrate, a top layer and bottom layer formed from a resilient polymeric material. The substrate has a density less than that of the polymer gel. Therefore, it is not seen that the doll structure would have performed differently than the reinforced polymeric pad of the present invention in terms of shock absorption. Acker does not specifically disclose the doll structure wherein the core 53 is made from a foamed polymeric material. Hills, however, teaches a stuffed animated toy wherein the stuffing

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material can be made from PVC foam, mat of natural or synthetic fibers (column 6, lines 30-40). Therefore, Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute PVC foam for the synthetic fibers because PVC foam and synthetic fibers have been shown in the art to be recognized equivalent stuffing materials to provide bulk and form to the doll structure.

It has been held that a recitation with respect to the manner in which a claimed reinforced polymeric pad is intended to be employed does not differentiate the claimed reinforced polymeric pad from a prior art doll structure satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Mere recitation of "suitable for absorbing shock" impacts no definite structure to the claimed reinforced polymeric pad and is therefore found inadequate to convey structure in any patentable sense.

4. Claims 8, 11, 13-15, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker (US 5,066,259) in view of Hills (US 4,170,086) as applied to claims 1 and 16 above, and further in view of Yates (US 6,027,674). Acker does not specifically disclose the doll structure wherein the polymer gel made from an epoxidized vegetable, a thermoplastic polymer and prepolymer. Yates, however, teaches a cushion material finding application in numerous toys comprising a gel/foam combination made from an epoxidized mineral oil and a blend of SEBS gel with other homopolymer which reads on Applicant's prepolymer. Yates discloses that varying the amount of the plasticized oil to impart the resilient properties of the cushion

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material is known in the art (column 2, lines 60-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the gel composition as taught by Yates motivated by the desire to provide the toys with excellent resiliency.

Yates does not specifically disclose an epoxidized vegetable oil. The examiner takes Official Notice that it is common and well known in the art to substitute the vegetable oil for the mineral oil because the two materials have been shown in the art to be recognized equivalent plasticizer oil for the gel composition.

Yates does not specifically disclose the amounts of thermoplastic polymer and prepolymer and plasticizer oil. Since the concentration is recognized as a result-effective variable, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical or provides unexpected results. Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the individual component of the gel composition having an amount in the range instantly claimed motivated by the desire to impart the resilient property of the material. This is in line with *In re Aller*, 105 USPQ 233 which holds discovering the optimum or workable ranges involves only routine skill in the art.

5. Claims 9, 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker (US 5,066,259) in view of Hills (US 4,170,086) and

Yates (US 6,555,214), as applied to claims 8 and 16 above, further in view of Burgdorfer et al (US 4,456,642). Yates does not specifically disclose the use of the tin compound as a catalyst. Burgdorfer, however, teaches a gel pad for use in wheelchair cushions wherein the gel composition comprises a tin compound as a catalyst (column 9, lines 10-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ tin compound as the catalyst of the gel composition motivated by the desire to promote the formation of the gel material.

Response to Arguments

6. The art rejections based on Acker and Hill have been maintained for the following reasons. Applicant argues that since both cited references are non-analogous, they cannot be combined to render obvious the present invention. The arguments are not commensurate in scope with the claims. The claims are related to a "reinforced polymeric pad". The combined teachings of Acker and Hill suggest a doll structure that meets all the structural limitations required by the claims, i.e., a foam substrate completely encapsulated by a polymeric gel envelope wherein the foam substrate has a density less than that of the polymeric gel. The examiner notes the manner in which a claimed reinforced polymeric pad is intended to be employed does not differentiate the claimed reinforced polymeric pad from a prior art doll structure satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). The examiner confirms that Acker and Hill are actually analogous to ***the claims*** in view of the reasons set forth above. Since there is a motivation to

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combine the teachings of Asker and Hill to achieve the claimed invention and the combination of the references does suggest a reasonable expectation of success, Asker is properly combinable with Hill to establish a *prima facie* case of obviousness. Accordingly, the art rejections are sustained. Any amendments showing unobvious differences between the claimed product and the prior art product would overcome the obviousness rejections.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HV

/Hai Vo/
Primary Examiner, Art Unit 1794